

**Remarks/Arguments:**

With respect to a matter of formality in the present case, the Examiner cited German Patent Application No. 198 26 978.1 to Matthews et al. as part of a 35 U.S.C. § 103(a) rejection. Matthews et al. was published on April 29, 1999, subsequent to the priority date of the parent of the present application (October 7, 1998) and within one year of the U.S. filing date of the present application (April 21, 2000). Thus, it is respectfully submitted that Matthews et al. is not prior art in the present case.

Turning now to the merits of Applicants' invention as recited in claim 1 (as previously amended), a cooked sausage is provided including a mixture of a meat emulsion and a fermented milk product having a pH of 4.6 or more. The fermented milk product is substantially homogeneously dispersed through the meat emulsion. The mixture has a pH of about 5.5 or more, and comprises 10 to 40% by weight of the fermented milk product.

Claims 1 - 5, 7, 10 - 24, 26, 28, 31, 32, and 34 - 47 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent No. 07-107941 to Minoru et al. in view of U.S. Patent No. 4,362,750 to Swartz or German Patent Application No. 198 26 978.1 to Matthews. It is respectfully submitted, however, that the claims are patentable over the art of record for the reasons set forth below.

The problem that the present invention overcomes is the desire to add significant quantities (e.g., greater than about 10% by weight) of fermented milk product to a meat mixture to achieve a low calorie *cooked* sausage product having a tangy taste. The applicants have discovered that the addition of significant quantities of yogurt or other known acidic fermented milk products leads to undesired moisture loss upon cooking, owing to the depression of the pH of the mixture towards the isoelectric point of the meat. Applicants discovered that a solution to this problem is achieved through the use of mild yogurts with a pH of about 4.6 or more, and preferably about 4.8 or more. Page 9, lines 2 and 3.

Accordingly, each of Applicants' pending claims recites:

- (1) a cooked sausage;
- (2) use of a fermented milk product having a pH of 4.6 or more;
- (3) a *mixture* of meat emulsion and milk product having a *pH of about 5.5 or more*; and

- (4) the mixture comprises 10 to 40% by weight of the milk product.

In sharp contrast to Applicants' objective of retaining moisture, the problem Minoru et al. sought to overcome was that associated with producing a *fermented* (i.e., uncooked) meat product utilizing a relatively low curing and aging temperature (5 - 10°C). Paragraph 0005. More specifically, conventional bacteria and yeast materials in processed meat products are stated in Minoru et al. to be utilized in the U.S. and Europe to improve the quality of the product and shorten the aging period. Paragraph 0005. However, these meat products are fermented and aged at medium-high temperatures of 25 - 37°C. Paragraph 0005. In Japan, production is stated to be premised on low-temperature (5 - 10°C) curing and aging, which makes the use of such microorganisms difficult. Paragraph 0005.

Minoru et al. disclose a method of production of a fermented meat product in which aging of the meat at low temperature is promoted, and a strange taste and offensive smell is corrected by adding a fermented dairy product to the raw material meat. Paragraph 0012. Although Minoru et al. teach the possibility of adding 0.1 - 10% by weight of fermented dairy product to raw material meat, 1 - 3% by weight is even more desirable. Paragraph 0014. Minoru et al. specifically teach away from the addition of more than 10% by weight of fermented dairy product, explaining that the meat exudes a strong raw fermented smell coming from the fermented dairy product, making it unpleasant. Paragraph 0014. Furthermore, each of the examples provided includes amounts of fermented milk product significantly less than 10%.

With reference to the sausage product of Minoru et al. having a pH of 6.05 (Paragraph 0031), such a product is achieved with the addition of a mere 5% by weight of fermented milk (Paragraph 0029), as opposed to the 10 - 40% by weight required by the present invention. Notably, the purpose of Table 6 (Paragraph 0031) is to demonstrate that the addition of fermented milk to a sausage or cured meat has very little effect on the pH of the product. Furthermore, no acidic flavor or smell results from the addition of fermented milk. Paragraph 0030. In sharp contrast, the present invention intends for the fermented milk product to add a distinctive flavor and aroma to the final cooked sausage product. Page 13, lines 6 - 8.

Moreover, Minoru et al. is silent regarding the essential teaching of the present invention, which is to control the pH of a cooked sausage product above about 5.5 when adding significant quantities (10 - 40% by weight) of fermented milk product to achieve a low calorie sausage product with a distinctive flavor and a juicy and desirable texture after cooking. Page 5, lines 8 - 12. As explained previously, Minoru et al. teach against the addition of more than

10% by weight of fermented dairy product. The problem of reduced water-retaining capacity of the meat resulting in impaired juiciness and texture of the final product (described in the present application at Page 5, lines 12 - 16) does not arise in Minoru et al. since the Minoru et al. product is not cooked. Even if, *arguendo*, a person skilled in the art attempted to modify the fermented product of Minoru et al. by adding substantially more fermented milk product (contrary to the teaching of Minoru et al.), and even if a person skilled in the art attempted to cook the product of Minoru et al. instead of fermenting it, Minoru et al. offers no guidance regarding how to control water loss.

Thus, Applicants respectfully submit that a person of ordinary skill in the art would not be motivated to add 10 to 40% by weight of fermented milk product to achieve a low calorie *cooked* sausage product. In other words, the present invention is non-obviousness over Minoru et al.

In further contrast to Applicants' objective of retaining moisture, and in contrast to the objective of Minoru et al., Swartz seeks to alter the taste of sausage by the inclusion in the sausage of a cultured dairy product. Column 2, lines 38-42. By the use of the cultured dairy product as a flavoring material, the sausage is given an instant tangy flavor without the normal 12 to 24 hours of fermentation typically needed to accomplish the same result. Column 2, lines 43-47. The amount of cultured dairy product added depends upon the desired flavor. However, Swartz teaches an amount of only 2% to 8% based on the weight of the meat. Column 5, lines 38-47. Examples 2 and 3 of Swartz teach the addition of a cultured dairy product in amounts of 4.5% and 3.3% respectively. Column 7, lines 12 and 56.

Swartz is completely silent with respect to an overall pH of the final meat mixture. Swartz adds yogurt strictly as a flavor enhancer, and neither discloses nor suggests a pH of 5.5 or more for the final meat mixture as claimed by Applicants. Further, Applicants submit that Swartz's cultured dairy product parameters of 2 - 8% by weight teaches away from the desirable parameters now discovered and claimed by Applicants, particularly the desirability of producing a low calorie product with a distinctive flavor.

Therefore, the present invention is clearly different from Swartz in that its main purpose is to provide a cooked sausage which comprises fewer calories than traditional meat sausages, while Swartz's main purpose is to enhance flavor with the addition of cultured dairy products. Swartz is silent with respect to an amount of mild yogurt of 10 - 40% weight and an overall pH of the final meat mixture of 5.5.

Moreover, Swartz fails to recognize the problem outlined above, fails to suggest the addition of substantial proportions of cultured dairy product to comminuted meat for making a

cooked sausage, and fails to suggest controlling the pH and the amount of yogurt added such that the overall pH of the meat mixture remains at least about 5.5. Accordingly, the Office Action fails to establish *prima facie* obviousness of Applicants' claimed invention because there is no cited suggestion or motivation in Swartz, or elsewhere, to go against the teaching of Swartz to arrive at Applicants' claimed pH parameters.

Similar to Minoru et al., Swartz is silent regarding the essential teaching of the present invention, which is to control the pH of a cooked sausage product above about 5.5 when adding significant quantities (10 - 40% by weight) of fermented milk product to achieve a low calorie sausage product with a distinctive flavor and a juicy and desirable texture. Page 5, lines 8 - 12. Even if, *arguendo*, a person skilled in the art were to combine the teachings of Minoru et al. and Swartz, the person would nevertheless not be motivated to produce a cooked meat product comprising substantial proportions (10 - 40% by weight) of fermented milk product.

It is respectfully submitted that there is no motivation or suggestion to combine Minoru et al. with Swartz as proposed in the Office Action. To establish obviousness, such a suggestion must be demonstrated. Otherwise, the proposed combination of references should be considered to have been made in impermissible hindsight reconstruction. As described previously, the problem Minoru et al. sought to overcome was that associated with producing a fermented meat product utilizing a relatively low curing and aging temperature, while Swartz sought to improve the taste of sausage by the inclusion in the sausage of a cultured dairy product. Thus, Applicants respectfully submit that a person of ordinary skill in the art would not be motivated to make the combination suggested by the Examiner as obvious. Furthermore, insofar as Swartz discloses the use of a cultured dairy product as a flavor enhancer while Minoru et al. seeks to avoid the strong smell/taste of fermented dairy product, the two documents are incompatible with one another.


Accordingly, for the foregoing reasons, it is respectfully submitted that independent claims 1, 11, 24, and 32 are patentable over the art of record. Furthermore, claims 2 - 5, 7, 10, 12 - 23, 26, 28, 31, and 34 - 47 include all the features of the independent claims from which they depend. Thus, claims 2 - 5, 7, 10, 12 - 23, 26, 28, 31, and 34 - 47 are also patentable over the art of record for the reasons set forth above.

Appln: No. 09/557,418  
Amendment Dated July 2, 2003  
Reply to Office Action of April 2, 2003

FJC-102US

In view of the arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,

  
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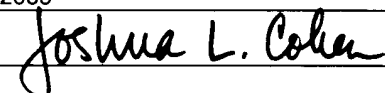
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